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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,587	10/03/2003	Wei-Hung Huang	JCLA5547-CA	2486

7590

02/28/2005

J.C. Patents  
4 Venture, Suite 250  
Irvine, CA 92618

EXAMINER
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TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/678,587	<b>Applicant(s)</b> HUANG, WEI-HUNG	
	<b>Examiner</b> Joseph D. Torres	<b>Art Unit</b> 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/491,201.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The Drawing amendment filed 10/29/2004 is approved, however the objection to the drawings will be maintained until a replacement copy is provided (Note: only a marked up copy of the drawings was submitted with the amendment filed 10/29/2004).

### ***Specification***

2. In view of the amendment filed 10/29/2004, all objections to the abstract are withdrawn.

### ***Response to Arguments***

3. Applicant's arguments filed 10/29/2004 have been fully considered but they are not persuasive.

The Applicant contends, "Shimoda and the Lahmeyer, either implicitly or explicitly, do not disclose, teach, or suggest the feature of 'a second decoder, for reading the error detection codes from the memory, storing the error detection codes into a second buffer other than the memory, and performing a second decoding on the data stored in the memory when the data stored in the memory is sufficient to be assembled as a complete data block'".

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The Examiner disagrees and asserts that Shimoda explicitly teaches a first Reed-Solomon decoder 252 in Figure 9B of Shimoda, for performing a first decoding to the row data of Figure 8C stored in the first buffer 249 and generating decoded data, wherein the decoded data is stored into a memory 257, the decoded data is also sent to an error detection code generator 254 via memory 253, the error detection code generator 254 generates the error detection codes for the decoded data, the generated error detection codes are stored into the memory 257; and a second Reed-Solomon decoder 258, for reading the error detection codes from the memory 257 and performing a second decoding on the data stored in the memory 257 when the data stored in the memory is sufficient to be assembled as a complete data block (Note: the first Reed-Solomon decoder 252 decode the row data of Figure 8C one row at a time whereas the second Reed-Solomon decoder 258 requires a whole block of data since it decodes columns hence the second Reed-Solomon decoder 258 must wait for a whole block of data before the second Reed-Solomon decoder 258 can commence decoding the columns). However, Shimoda does not teach the internal operations of the second Reed-Solomon decoder 258 nor any of the internal buffering required by a Reed-Solomon decoder for decoding of data. Lahmeyer on the other hand teaches a Reed Solomon decoder, with an internal buffer RAM 30 in Figure 1 of Lahmeyer that is different from the external memory 257 in Figure 9B of Shimoda, for use in the error correction algorithm required for Reed-Solomon codes internal to the Reed-Solomon decoder (Note: internal buffer RAM 30 in Figure 1 of Lahmeyer is only used for the error correction processing of Reed-Solomon codes internal to a Reed-Solomon decoder);

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hence Lahmeyer teaches storing the error detection codes into a second internal buffer RAM 30 in Figure 1 of Lahmeyer other than the external memory 257 in Figure 9B of Shimoda.

The Applicant contends, "the Shimoda and the Lahmeyer, either implicitly or explicitly do not disclose, teach, or suggest the feature of 'a first decoder, for performing a first decoding to the row data stored in the first buffer and generating decoded data, the decoded data is stored into a memory different from the buffer, the decoded data is also sent to an error detection code generator, the error detection code generator generates the error detection codes for the decoded data, the generated error detection codes are stored into the memory'".

The Examiner disagrees and asserts that Shimoda teaches a first Reed-Solomon decoder 252, for performing a first decoding to the row data of Figure 8C stored in the first buffer 251 and generating decoded data, the decoded data is stored into a memory 257 different from the buffer 251, the decoded data is also sent to an error detection code generator 254, the error detection code generator 254 generates the error detection codes for the decoded data, the generated error detection codes are stored into the memory 257.

The Examiner disagrees with the applicant and maintains all rejections of claims 1-9. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1-9 are not patentably distinct or non-obvious over

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the prior art of record in view of the references, Shimoda; Kenji et al. (US 5404248 A, hereafter referred to as Shimoda) and Lahmeyer; Charles R. (US 4649541 A) as applied in the last office action, filed 07/13/2004. Therefore, the rejection is maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda; Kenji et al. (US 5404248 A, hereafter referred to as Shimoda) in view of Lahmeyer; Charles R. (US 4649541 A.)

See the Non-Final Action filed 07/13/2004 for detailed action of prior rejections.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5-10 of U.S. Patent No. US 6662335 B1 in view of Roth; Ron M. et al. (US 5719884 A, hereafter referred to as Roth).

See the Non-Final Action filed 07/13/2004 for detailed action of prior rejections.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

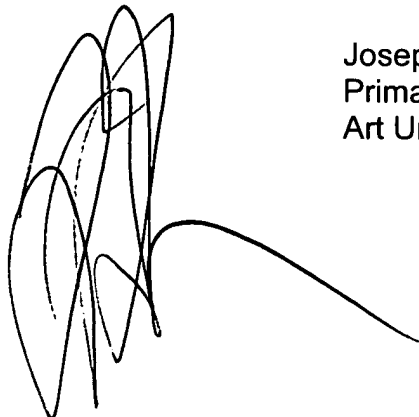
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

Joseph D. Torres, PhD  
Primary Examiner  
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